

## Cal/Ecotox

Exposure Factors for Clapper Rail (*Rallus longirostris*)<sup>\*</sup>

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Endpoint Type	Endpoint Value	Error	Range	Units	Sex	Life Stage	Location	Note	Reference
Body Weight - Mean	261.7	8.4		g	NR	Adult	TX	a	1
Body Weight - Mean	279.7	6.9		g	NR	Adult	TX	b	1
Clutch or Litter Size	review						USA		2
Clutch or Litter Size	review						USA		2
Clutch or Litter Size	review						USA		2
Clutch or Litter Size	6.55	0.19 SE	5-8	F	Adult		Orange; CA	c	3
Clutch or Litter Size	7.27	0.96 SD	6-9	F	Adult		Alameda; CA	d	4
Clutch or Litter Size	7.22		5-9	NR	NR		San Francisco; CA	e	5
Dietary Composition	review						USA		2
Dietary Composition	review						USA		2
Dietary Composition	review						USA		2
Dietary Composition	crabs, California horn snails, isopods, crayfish, decapods, beetles			NR	Adult		Orange; CA	f	6
Dietary Composition	amphipods, garden snails, crane flies, house mice, California voles			NR	Adult		Orange; CA	g	6
Dietary Composition	shrimp (0.25%), water beetle (56.50%), dragonfly nymphs (0.50%), damselfly nymphs (2.00%), leech (3.75%), unident. fish (31.75%)			NR	Adult		MEXICO	h	7
Dietary Composition	isopoda (48.5%), unident. parts (1.50%), corbicula (50.00%)			NR	Adult		AZ	i	7
Dietary Composition	crayfish (94.67%), ground beetle (0.11%), unident. beetle (0.56%), weevils (2.78%), damselfly nymphs (0.11%), grasshoppers (0.11%), insect eggs (.11%), unident. parts (0.78%), spider (0.56%), seeds (0.11%), corbicula (0.06%), unident. mammal bone (0.06%)			NR	Adult		AZ; CA	j	7
Dietary Composition	Modiolus demissus (56.5%), Lycosidae (15%), Macoma balthica (7.6%), Hemigrapsis oregonensis (3.2%), Hyanastra obsoleta (2%), Spartina leiantha (14.55%)			NR	NR		Santa Clara; CA	k	8
Duration of Incubation or Gestation	24.2		22-29	d	B	Embryo	Alameda; CA	l	4
Duration of Incubation or Gestation			23-27	d	NR	NR	San Francisco; CA	m	5
Hatching Success	81%			B	Hatching		Orange; CA	n	3
Hatching Success	56%			B	Hatching		Alameda; CA	o	4
Home Range	0.81		0.36-1.66	ha	B	Adult	Orange; CA	p	9
Home Range	15			ha	NR	Adult	AZ	q	10
Home Range	24			ha	NR	Adult	AZ	r	10
Home Range	9			ha	NR	Adult	AZ	s	10
Home Range	7			ha	NR	Adult	AZ	t	10
Home Range	8			ha	NR	Adult	AZ	u	10

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Endpoint Type	Endpoint Value	Error	Range	Units	Sex	Life Stage	Location	Note	Reference
Longevity	7-06			yr-mo	NR	Adult	USA	v	11
Population Density			0.1-1.1	birds/ha	B	Adult	Alameda; Marin; San Mateo; Santa Clara; Sonoma; CA	w	12
Population Density			0.3-1.6	birds/ha	B	Adult	Alameda; Marin; San Mateo; Santa Clara; Sonoma; CA	x	12
Population Density	0.89			birds/ha	B	Adult	Alameda; CA	y	4
Population Density	0.69			birds/ha	B	Adult	Alameda; CA	z	4
Population Density	1.47			birds/ha	B	Adult	Alameda; CA	aa	4
Population Density			0.98-1.21	birds/acre	NR	NR	San Francisco; CA	ab	5
Survival/ Mortality	review						USA		2
Survival/ Mortality	review						USA		2
Survival/ Mortality	review						USA		2
Territory Size	review						USA		2
Territory Size	review						USA		2
Territory Size	review						USA		2
Time of Mating/ Laying	late March			B		Hatching	Alameda; CA	ac	4
Time of Nesting	April			NR		NR	San Francisco; CA	ad	5

### Notes

- a mean body weight in fresh water acclimated birds; N=8; January-February; High Island, Chambers Co.
- b mean body weight in sea-water acclimated birds; N=16; January-February; High Island, Chambers Co.
- c mean clutch size (1 year); N=33 nests; spring; Tijuana Marsh, Upper Newport and Anaheim Bays
- d mean clutch size; N=26 nests; April-August; south San Francisco Bay
- e mean clutch size; N=27 nests; spring; Dumbarton Bridge Marsh
- f prey items in regurgitated pellets, in order of frequency of occurrence; N=18 pellets; spring; upper Newport Bay
- g unquantified dietary items identified in regurgitated pellets; N=NR; upper Newport Bay
- h dietary item occurrence by volume in stomach contents; N=4 stomachs; June; Colorado Delta
- i dietary item occurrence by volume in stomach contents; N=2 stomachs; June; Gila/Colorado River confluence
- j dietary item occurrence by volume in stomach contents; N=9 stomachs; June; Topock Marsh to Imperial Lake
- k Volumetric percentage of food items in stomach contents; N=18 stomachs; San Francisco Bay
- l mean incubation period; N=5 nests; April-August; south San Francisco Bay
- m estimated incubation period in field; N=3 nests; December; Dumbarton Bridge Marsh
- n proportion of nests in which at least one egg hatched; N=130 nests; spring; Tijuana Marsh, Upper Newport and Anaheim Bays
- o proportion of nests in which at least one egg hatched; N=50 nests; April-August; south San Francisco Bay
- p mean home range size of radiotagged and untagged birds; N=9 radiotagged birds; upper Newport Bay
- q mean home range size; N=16 birds; August-July; lower Colorado River Valley
- r mean home range size; N=6 birds; January-February; lower Colorado River Valley
- s mean home range size; N=4 birds; November-December; lower Colorado River Valley
- t mean home range size; N=18 birds; May-July; lower Colorado River Valley
- u mean home range size; N=5 birds; March-April; lower Colorado River Valley
- v from USFWS Bird Banding Laboratory data; N=758 band recoveries
- w range of mean densities; N=5 sites; nonbreeding; San Francisco Bay
- x range of mean densities; N=5 sites; breeding; San Francisco Bay
- y mean breeding density based on rope drag and call count data; N=117 ha; April-August; south San Francisco Bay - Mowry Slough
- z mean breeding density based on rope drag and call count data; N=55 ha; April-August; south San Francisco Bay - Ideal Marsh

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- aa mean breeding density based on rope drag and call count data; N=68 ha; April-August; south San Francisco Bay-Dumbarton Point  
ab range of mean population densities; N=1 marsh; December; Dumbarton Bridge Marsh  
ac beginning of lay; N=NR; April-August; south San Francisco Bay  
ad beginning of nesting; N=1 marsh; December; Dumbarton Bridge Marsh

### References

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